

ABSORBENT ARTICLE

FIELD

[0001] The present disclosure is generally directed to absorbent articles designed and configured to leverage a greater amount of bio-based materials and/or to minimize the inclusion of unwanted materials towards providing a more pure end product to consumers desiring the same.

BACKGROUND

[0002] The vast majority of commercially available absorbent articles, such as diapers, contain a significant amount of petrochemicals. For example, most mass-produced diapers include fibrous outer layers that contain at least some petroleum-based fibers and a liquid barrier layer made from a petroleum-based film. This segment of absorbent articles also typically contains lotions on the wearer-facing surface, and include fragrances or perfumes for positive scent experiences. There are however a few small manufacturers that are beginning to offer absorbent articles that are touted to be “eco-friendly,” with benefits for the environment and/or the wearer of the absorbent article. Some eco-friendly diapers are chlorine-free, lotion-free, and fragrance free, so as to be more “natural” of a product. Unsurprisingly, the eco-friendly diapers focus on benefits to the wearer; for example, they can contain a wearer-facing surface that is free of lotions and include natural fibers or other materials. However, caregivers of minors or non-ambulatory adults also have significant contact with the absorbent articles from the non-wearer facing surface as they hold the minors and/or change the absorbent articles. Thus, there is need for absorbent articles that contain natural or bio-based materials and/or that are devoid of unwanted materials in close proximity of both of its outer-facing surfaces and not just the wearer-facing surface.

[0003] As noted above, some commercially-available eco-friendly diapers are fragrance free as perfume raw materials and fragrance compositions can be skin sensitizers to some individuals. Without any fragrance added to the diapers however, the remaining fibrous and film-based components can have an inherent odor that, while not unsafe for wearers of the diapers, can be off-putting to caregivers. Thus, there is need for absorbent articles that contain bio-based materials and/or that are devoid of masking fragrances that also do not have an undesirable odor.

BRIEF DESCRIPTION OF THE DRAWINGS

[0004] The above-mentioned and other features and advantages of the present disclosure, and the manner of attaining them, will become more apparent and the disclosure itself will be better understood by reference to the following description of example forms of the disclosure taken in conjunction with the accompanying drawings, wherein:

[0005] FIG. 1 is a plan view of an example absorbent article in the form of a taped diaper, garment-facing surface facing the viewer, in a flat laid-out state;

[0006] FIG. 2 is a plan view of the example absorbent article of FIG. 1, wearer-facing surface facing the viewer, in a flat laid-out state;

[0007] FIG. 3 is a front perspective view of the absorbent article of FIGS. 1 and 2 in a fastened position;

[0008] FIG. 4 is a front perspective view of an absorbent article in the form of a pant;

[0009] FIG. 5 is a rear perspective view of the absorbent article of FIG. 4;

[0010] FIG. 6 is a plan view of the absorbent article of FIG. 4, laid flat, with a garment-facing surface facing the viewer;

[0011] FIG. 7 is a cross-sectional view of the absorbent article taken about line 7-7 of FIG. 6;

[0012] FIG. 8 is a cross-sectional view of the absorbent article taken about line 8-8 of FIG. 6;

[0013] FIG. 9 is a plan view of an example absorbent core or an absorbent article;

[0014] FIG. 10 is a cross-sectional view, taken about line 10-10, of the absorbent core of FIG. 9;

[0015] FIG. 11 is a cross-sectional view, taken about line 11-11, of the absorbent core of FIG. 10;

[0016] FIG. 12 is a plan view of an example absorbent article of the present disclosure that is a sanitary napkin;

[0017] FIG. 13 is an example cross-sectional view taken within a front waist region of an absorbent article;

[0018] FIG. 14 is an example cross-sectional view taken within a crotch region of an absorbent article;

[0019] FIG. 15 is an example cross-sectional view taken within a back waist region of an absorbent article; and

[0020] FIG. 16 is a side view of a package containing a plurality of absorbent articles.

DETAILED DESCRIPTION

[0021] Various non-limiting forms of the present disclosure will now be described to provide an overall understanding of the principles of the structure, function, manufacture, and use of the absorbent articles disclosed herein. One or more examples of these non-limiting forms are illustrated in the accompanying drawings. Those of ordinary skill in the art will understand that the absorbent articles described herein and illustrated in the accompanying drawings are non-limiting example forms and that the scope of the various non-limiting forms of the present disclosure are defined solely by the claims. The features illustrated or described in connection with one non-limiting form may be combined with the features of other non-limiting forms. Such modifications and variations are intended to be included within the scope of the present disclosure.

Definitions

[0022] “Absorbent article” means devices that absorb and/or contain liquid. Wearable absorbent articles are absorbent articles placed against or in close proximity to the body of the wearer to absorb and contain various exudates discharged from the body. Non-limiting examples of wearable absorbent articles include diapers, pant-like or pull-on diapers, training pants, sanitary napkins, pantliners, incontinence devices (liners, pads, and briefs), and the like.

[0023] “Animal-based fibers” includes wool, hair, and secretions, such as silk.

[0024] “Bio-based content” refers to the amount of carbon from a renewable resource in a material as a percent of the mass of the total organic carbon in the material, as determined by ASTM D6866-10, method B. In order to apply the methodology of ASTM D6866-10 to determine the bio-based content of any absorbent article or component thereof, a sample can be ground into particulates less than about 20